WHAT IS CLAIMED IS:

1. A projection lens for enlarging an image on a display surface and projecting the enlarged image onto a screen, the projection lens comprising:

a first group of lenses having a negative power; and

a second group of lenses having a positive power,

wherein the first and the second groups are sequentially arranged from an enlargement side to a reduction side, and

wherein the projection lens has a field angle of about 110° or more and the projection lens satisfies the following conditional expressions (1) to (4) :

(1) $25.0 < Fb$,

(2) $F < 0.65\ H$,

(3) $30F < |EP|$, and

(4) $4F < T$,

where Fb is an air-converted distance from a final surface at the reduction side of the lens to an image point, H is a maximum image height at the reduction side, F is a focal distance of the whole projection lens, EP is a exit pupil distance, and T is an air-converted distance obtained by air-converting a gap between the first group of lenses and the second group of lenses.

2. The projection lens according to Claim 1, wherein the projection lens further satisfies the following conditional expressions (5) and (6):

(5) $-3.5 < F_1/F < -1.5$, and

(6) $3.0 < F_2/F < 5.5$,

where F_1 is a focal distance of the first group of lenses, and F_2 is a focal distance of the second group of lenses.

3. The projection lens according to Claim 1, wherein the first group of lenses comprises

at least one aspheric lens, and when a shape difference between an approximate spherical surface and an aspheric surface is referred to as an aspheric amount, the aspheric amount of the aspheric lens is about 0.5 mm or more.

4. The projection lens according to Claim 3, wherein the aspheric lens is a hybrid lens obtained by bonding a resin layer to a surface of a raw material for a glass lens.

5. The projection lens according to Claim 1, wherein the second group of lenses comprises at least one aspheric lens and at least one cemented lens.

6. The projection lens according to Claim 5, wherein the cemented lens comprises at least one lens having a positive power and one lens having a negative power, and wherein the cemented lens satisfies the following conditional expressions (7) and (8):

(7) $0.15 < |Np-Nn|$, and

(8) $30 < |Vp-Vn|$,

where Np is a refractive index of the lens having a positive power, Nn is a refractive index of the lens having a negative power, Vp is an Abbe number of the lens having a positive power, and Vn is an Abbe number of the lens having a negative power.

7. The projection lens according to Claim 1, wherein light path folding means for folding a light path is provided between the first group of lenses and the second group of lenses.

8. The projection lens according to Claim 1, wherein color composition means is provided between the final surface at the reduction side of the second group of lenses and the image point.

9. A projection image display apparatus for enlarging an image on a display surface with a projection lens and projecting the enlarged image onto a screen,

wherein the projection lens comprises a first group of lenses having a negative power and a second group of lenses having a positive power, which are sequentially arranged from an enlargement side to a reduction side, wherein said projection lens

arranged from an enlargement side to a reduction side, wherein said projection lens satisfies the following conditional expressions (1) through (4), and has a field angle of about 110° or more:

(1) $25.0 < Fb$,

(2) $F < 0.65\ H$,

(3) $30F < |EP|$, and

(4) $4F < T$,

where Fb is an air-converted distance from a final surface at the reduction side of the lens to an image point, H is a maximum image height at the reduction side, F is a focal distance of the whole projection lens, EP is a exit pupil distance, and T is an air-converted distance obtained by air-converting a gap between the first group of lenses and the second group of lenses.